IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Claussen et al.

Serial No.:

10/004,719

Group Art Unit:

2855

Filed:

12/04/2001

Examiner:

Dickens,C.

For:

TIRE PRESSURE MONITORING METHOD

Atty. Dkt. No. 1

60,680-553

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

REPLY PURSUANT TO 37 C.F.R. § 1.111

Dear Sir:

This paper is responsive to the Office Action mailed June 4, 2003.

REMARKS

I IN TRODUCTION

Claims 16-29 are presently pending in this application. Applicants respectfully request further examination and reconsideration of the application in view of the following arguments.

Certificate of Express Mailing

I hereby certify that this Reply Pursuant to 37 C.F.R. § 1.111 is being deposited with the United States Postal Service as Express Mail No. EV222033496US, postage prepaid, in an envelope addressed to, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 3rd day of September 2003.

Christine Jaymes

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TECHNOLOGY CENTER 2800



REJECTION OF CLAIMS 16-29 UNDER 35 U.S.C. § 103(A)

TECHNOLOGY CENTER 2000 Claims 16-29 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Walker et al. (U.S. Patent No. 5,409,045) in view of McGhee (U.S. Patent No. 5,505,080). Applicants respectfully submit that the rejection of claims 16-29 under 35 U.S.C. § 103(a) is improper because the combination of Walker et al. and McGhee fails to teach or suggest all of the limitations set forth in the claims.

"Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in each and every case." MPEP § 2141 (emphasis in original).

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

MPEP § 2143. Applicant submits that the combination of Walker et al. and McGhee fails to teach or suggest all of the limitations set forth in the claims.

Independent claim 16 recites a "[m]ethod of determining a tire pressure in a vehicle tire" including the step of "providing a pulse of compressed fluid to said conduit when said first fluid pressure is less than said target pressure". Independent claim 23 recites similar limitations. Applicants respectfully submit that the combination of Walker et al. and McGhee does not disclose or suggest a method for determining a tire pressure meeting the above-recited limitations.

Applicants' claimed invention is directed to tire pressure monitoring. In a conventional system, tire pressure is determined (whether as part of a monitoring process or as part of tire inflation or deflation processes) by generating a pulse of compressed

fluid having a pressure greater than the tire pressure. Because the pressure is greater than tire pressure, the wheel end valve opens and the conduits of the air control circuit and the tire settle to a static pressure value. This operation results in a slight increase in tire pressure. In systems where tire deflation is not implemented on a regular basis, the repeated monitoring operations can therefore lead to a cumulative undesireable increase in tire pressure. In Applicants claimed invention, pulses of compressed fluid less having pressures *less than* a target pressure are repeatedly introduced into the conduit with the pressure gradually increasing until the pressure in the conduit opens the wheel end valve. In this manner, the pressure in the conduit is maintained at or below the tire pressure during monitoring operations and undesirable pressure increases in the tire pressure are avoided.

Walker et al. discloses a method for controlling tire deflation as opposed to a method for monitoring tire pressure as claimed by Applicants. As part of the disclosed method, Walker determines the tire pressure in a central conduit and compares the measured pressure to a target pressure. Col. 6, lines 47-57. Walker does not, however, "provid[e] a pulse of compressed fluid to said conduit when said first fluid pressure is less than said target pressure." as recited in claim 16 and in substantially similar terms in claim 23. Rather, Walker adjusts the pressure in the conduit when the measured pressure is greater than the target pressure—consistent with the purpose of deflating the tire. See Figure 5, (" $P_0 > P_D$?") and Figure 5A (" $P_N > P_T$?"). Further, Applicants submit that McGhee simply does not disclose or suggest any control algorithms for monitoring or controlling tire pressure—much less the steps of the claimed method.

Because the combination of Walker et al. and McGhee fails to teach or suggest all of the claimed limitations, Applicants respectfully submit that the rejection of independent claims 16 and 23 under 35 U.S.C. § 103(a) is improper. Accordingly, Applicants request that the rejection of claims 16 and 23 under 35 U.S.C. § 103(a) be withdrawn. Further because each of claims 17-22 and 24-29 depend from one of the aforementioned independent claims, Applicants submit that the rejection of claims 17-22 and 24-29 under 35 U.S.C. § 103(a) is also improper and request that the rejection be withdrawn.

IV. CONCLUSION

For the above cited reasons, all of the claims presently pending in this application are believed to be allowable. If the Examiner has any further questions or concerns, the Examiner is invited to contact the Applicant's undersigned attorney.

Respectfully submitted,

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